EXECUTIVE SUMMARY

MINUTEMAN MISSILE TRANSPORTER-ERECTOR ACCIDENT INVESTIGATION

TRANSPORTER-ERECTOR (TE) NSN 1450-01-261-2835AH Rig # 90W00014
CONTAINER NSN 1450-01-261-0306AH Rig # 90W00036
GROUND TEST MISSILE (GTM) # 078 SERIAL # 0000060

VANDENBERG AIR FORCE BASE, CALIFORNIA

29 JUNE 2001

On 29 June 2001, at 1010 PDT, 1710 Zulu, a Minuteman ICBM TE carrying a Minuteman III GTM overturned on to its top on Vandenberg AFB, CA while negotiating an ascending left curve. The TE, assigned to the 576 Flight Test Squadron (FLTS), VAFB, CA, was involved in a four-day training mission at a Launch Facility in preparation for a Minuteman III ICBM Force Development Evaluation launch from the Western Range. The mishap operator, , assigned to the 576 FLTS, suffered minor injuries that were immediately treated and he was released and declared fit for duty. The passenger, , also assigned to the 576 FLTS, suffered a major injury to his right shoulder that was not life threatening.

Damage to the Minuteman ICBM TE and the GTM is extensive. The TE tractor is repairable and the TE container bogie is salvageable. The TE container and GTM are not repairable. Total damage was $2,253,230.71. The fully operational TE departed Launch Facility 26 at approximately 1000 hours local having been properly configured for transport. It transited the approximate five miles to the mishap site without incident. The mishap operator approached the first in the series of "S" curves at approximately 50 miles per hour. He successfully negotiated the first curve having a broad right-hand turn and a downhill grade. The next 200 feet of roadway is gradually inclined and is in transition from a right-hand to a left-hand curve having a tighter turn radius and an uphill grade. The mishap operator entered the mishap curve at speeds ranging from 49 to 53 mph. As the mishap operator proceeded through the turn, the loaded container's path of momentum and travel resisted the turn, and pursued a straight path. This caused the front of the container to apply a strong downward pressure on the rear portion of the TE tractor lifting and rotating the tractor in the direction of the turn. It also caused the TE container to tip precipitously. The TE container's landing gear footpad contacted the pavement and acted as a pivot point causing the right side of the TE to impact the pavement and slide. In the final mishap sequence the TE departed the roadway and rolled over on to its top and came to its final resting position, partially off the road, and inclined radically down a counter inclined embankment. The mishap operator extracted himself from the TE but the mishap passenger required emergency assistance to be extracted.

By clear and convincing evidence, excessive speed for the roadway conditions presented is the cause of this mishap. Substantial evidence shows that the lack of sufficient experience and inadequate training of the mishap driver are significant contributing factors. The mishap operator was operating the TE within TE operating parameters and within the 50 mile per hour speed limit. Given the calculation that a loaded TE cannot, under any circumstances, successfully negotiate the mishap curve at 56 miles per hour, the speed limit of 50 miles per hour is imprudent for this vehicle. The mishap operator failed to exercise sufficient judgment and adjust his speed to the configuration of the roadway. The mishap operator had, at most, driven a similarly configured TE under near-similar conditions only once before. While the TE operator's training includes a TE-specific orientation, it is conspicuously deficient of multi-axle, articulated vehicle fundamentals. This deficiency makes the mishap operator a minority among the current population of certified, licensed TE drivers in the unit. No member of the unit has attended this training since May 1999, apparently resulting from a unit-level decision to no longer avail itself of fundamentals drivers training courses such as those offered at the operational missile wings and at Vandenberg AFB CA. Furthermore, the unit's failure to require this training of its prospective TE drivers renders the unit in non-compliance with a governing Air Force Space Command Instruction. This Accident Investigation Board President finds this to be significant.

Under 10 U.S.C. 2254(d), any opinion of the accident investigators as to the cause of, or the factors contributing to, the accident set forth in the accident investigation report may not be considered as evidence in any civil or criminal proceeding arising from an accident, nor may such information be considered an admission of liability by the United States or by any person referred to in those conclusions or statements.